

REMARKS

Applicants enclose a copy each of the PCT/US96/20448 document and the page 58 of the October 19, 1994 flooring magazine article entitled "Non-Slip Rug Treatment," cited and provided in the prior Information Disclosure Statement of August 16, 2000. Also, attached is a copy of a Declaration of Mr. Edouard A. Brodeur, together with his curriculum vitae which was submitted in the parent application and has applicability here as outlined below. Additionally, a copy of the Declaration of J. Wayne Wilson, with attachments, is likewise provided and was filed in the parent application and has applicability as noted below.

The rejection of claims 17, 18 and 20 as anticipated by U.S. Patent No. 5,567,497, issued to Zegler et al is respectfully traversed. The present invention uses a preformed open mesh fiber reinforced foam layer with foam nodules that is adhered to a carpet tile or roll precoat so as to produce a carpet tile or roll that is substantially prevented from curling or doming. This is a result of the application of non-fused adhesive formulation to the relatively smooth back face of the carpet or tile and then fusing the adhesive with the preformed open mesh fiber enforced layer applied to the back face at a temperature low enough to prevent the collapse of foam nodules of the preformed open mesh fiber reinforced foam layer, e.g., a maximum temperature of 310°F.

The Examiner identifies in Zegler a floor covering in tile or roll form, a tufted primary carpet, a thermal plastic backing layer 34 and a contact layer 40. The Examiner identifies nodules in the Zegler carpet as the projections noted at column 4, lines 46-49.

The Examiner further notes that the contact layer 40 may be foamed to create a lower density than the backing layer 34 referencing column 5, lines 50-57.

When Zegler is examined in greater detail, it is apparent that a blowing agent is provided the contact layer 40 attached to the backing layer 34 and when the composite is exposed to fusing temperatures (see column 5, last paragraph of Zegler), carbon dioxide gas is generated and the contact layer is formed to provide a lower density. As the enclosed expert opinion of Mr. Brodeur states in paragraph 4, by applying fusing temperatures sufficient to generate carbon dioxide gas in a non-foamed contact layer, Zegler provides a teaching specifically contrary to the present invention and produces a product that will have doming or curling. That is, the process described in Zegler, according to Mr. Brodeur, insures a type of differential expansion and contraction between the contact layer and the backing layer, which as a result of this in situ foaming of the contact layer, doming or curling of the carpet or tile occurs.

To avoid this, applicants provide a preformed open mesh fiber reinforced foam layer with foam nodules. Applicants avoid the stresses associated with differential expansion and contraction that exist in the Zegler carpet. By following the Zegler teaching of applying the contact layer to the carpet backing at a temperature necessary to both fuse the contact layer and foam the layer, the result is the differential expansion of the two layers which leads to curling or doming. Mr. Brodeur, in paragraph 7, notes this phenomena and while he specifically references the method claims of the parent application, the same is true with respect to the resulting product. By preforming the open mesh reinforced foam layer and applying it to the backing, stresses between the

layers are minimized or avoided which results in a carpet substantially void of curling or doming contrary to the Zegler carpet.

The product produced by Zegler is thus different than the claimed product.

The rejection of claims 13, 14 and 16 as unpatentable over Zegler in view of Higgins, U.S. Patent No. 5,545,276, is respectfully traversed. The Examiner acknowledges that Zegler does not disclose a reinforcing scrim adjacent the relatively smooth back face of the carpet tile and held in place at least in part by the precoat. The Examiner relies on Higgins as a disclosure of a reinforcing scrim imbedded within an adhesive layer. This does not however cure the deficiencies of the Zegler reference as noted above, particularly since neither Higgins or Zegler disclose a preformed open mesh fiber reinforced foam layer with foam nodules in intimate contact with the back face of the carpet. Moreover, the mere existence, *per se*, of a scrim says nothing about the obviousness of the claimed invention because virtually all inventions are combinations of known elements. "Only God works from nothing. Men must work with all elements." Markey, *Why Not the Statute*, 65 JPO S331 (1983). It will also be recalled that the problem addressed in the present invention is to provide a carpet roll or tile which minimizes or eliminates curling or doming and possible disadvantageous condensation of vapors under the carpet. Zegler is simply concerned with non-slip carpeting and does not allude to problems of curling or doming and condensation. The basic reference is therefore deficient and Higgins does not make up for that deficiency.

The rejection of claim 15 as unpatentable over a combination of Zegler and Higgins and further in view of U.S. Patent No. 4,018,957 to Werner et al and/or U.S. Patent No. 3,945,955 issued to Ihde, Jr. is respectfully traversed.

Similarly, the rejection of claim 19 is respectfully traversed. The Examiner makes the presumption that the thin layer noted at column 4, line 65, of Zegler is similar to the composition of the backing or contact layer of Zegler since Zegler teaches, according to the Examiner, the importance of the layers being "fusably compatible." That they are fusably compatible says nothing with respect to their compositions. Moreover, the fact that they are fusably compatible as set forth in Zegler further demonstrates the differential resulting stresses which lead to curling or doming in Zegler. The Examiner relies on the tertiary references to Werner and Ihde as a showing of a silicon surfactant and use as part of the fused adhesive. While the Examiner has not found the fumed silica in the applied references, the Examiner notes that fumed silica essentially is a common and well known inorganic filler. Thus, the Examiner takes silicon surfactant out of the context of the references to Werner and Ihde and applies that to the adhesive set forth in these claims, then notes further that fumed silica could be added as well since it is a known filler. The mere existence of these constituents, i.e., the silicon surfactant and fumed silica as noted above says nothing about the obviousness of the claimed invention. *In re Rouffet* is instructive on this point:

[v]irtually all [inventions] are combinations of old elements. ... ("Most, if not all, inventions are combinations and mostly of old elements"). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Further, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as the blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." (citation omitted)

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this Court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the invention and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

The Examiner, with respect, engages in hindsight reconstruction which has been prohibited in a long line of Federal Circuit cases including Rouffet.

Finally, applicants reference the attached Declaration of J. Wayne Wilson. While this declaration was prepared in conjunction with the parent case relating to method claims, it is equally applicable here to demonstrate the commercial success of the claimed carpet. Note that while the carpet is more expensive than a competitor's product, it is accepted by customers because of the advantages of the carpet including assignee's guarantee for life of the carpet against doming, curling and dishing (see paragraph number 5 of the Wilson declaration).

Accordingly, reconsideration and allowance of the claims presently pending in the application is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claim(s) by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: Richard Besha
Richard G. Besha
Reg. No. 22,770

RGB:lsp
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

13. (Amended) A carpet tile comprising:

a primary backing having carpet fiber bundles tufted therethrough, the fibers bundles providing a tufted face;

a precoat locking the tufts in place to prevent easy extraction of individual fibers and providing a relatively smooth back face opposite the tufted face;

a reinforcing scrim adjacent the relatively smooth back face and held in place at least in part by said precoat; and

~~an~~ a preformed open mesh fiber reinforced foam layer with foam nodules held in substantially intimate contact with the relatively smooth back face forming a carpet tile substantially void of curling or doming.

14. (Amended) A carpet tile as recited in claim 13 wherein said preformed open mesh fiber reinforced foam layer with foam nodules is held in substantially intimate contact with the relatively smooth back face by a fused adhesive.

16. (Amended) A carpet tile as recited in claim 13 wherein said preformed open mesh fiber reinforced foam layer with foam nodules is held in substantially intimate contact with the relatively smooth back face by a formulation of said back face comprising:

PVC resin with a K value of 62-75100 parts

Plasticizer 60-100 parts

Filler 0-250 parts,

and substantially devoid of blowing agent.

17. (Amended) A carpet roll comprising:

a primary backing having carpet fiber bundles tufted therethrough, the fibers bundles providing a tufted face;

a precoat locking the tufts in place to prevent easy extraction of individual fibers and providing a relatively smooth back face opposite the tufted face; and

a preformed an open mesh fiber reinforced foam layer with foam nodules held in substantially intimate contact with the relatively smooth back face forming a carpet roll substantially void of curling.

18. (Amended) A carpet roll as recited in claim 17 wherein said preformed open mesh fiber reinforced foam layer with foam nodules is held in substantially intimate contact with the relatively smooth back face by a fused adhesive.

20. (Amended) A carpet roll as recited in claim 17 wherein said preformed open mesh fiber reinforced foam layer with foam nodules is held in substantially intimate contact with the relatively smooth back face by a formulation of said back face comprising:

PVC resin with a K value of 62-75 100 parts

Plasticizer 60-100 parts

Filler 0-250 parts,

and substantially devoid of blowing agent.